IN THE CLAIMS:

Please cancel/amend/add claims as set forth herein.

Claims 1-4 (Canceled).

5. (Currently Amended) A method for manufacturing a resonator filter <u>by forming a plurality of resonators</u> to minimize the current flowing <u>in order to reduce an intermodulation distortion</u> ~~through each resonator constructing the resonator filter made of several resonators~~ <u>by controlling a size of a plurality of the resonators</u>, which makes characteristic impedance of an equivalent circuit of the resonator filter ~~having~~ <u>have</u> a value in a range which is larger than about 65 Ω and smaller than or equal to about 79 Ω.

6. (Currently Amended) The method according to claim 5, wherein inductance of the equivalent circuit is determined according to the characteristic impedance as follows:

$$L = 4/\pi Y_0 \omega_0$$

wherein ω_0 represents a resonant frequency of the resonator filter <u>and Y_0 is admittance of transmission line</u>.

7. (Currently Amended) The method according to claim 5, <u>further employing a small ripple in order to increase the coupling between the resonators of the equivalent circuit.</u> <u>wherein the</u>

resonator filter reduces the intermodulation distortion of the resonator filter by increasing coupling between the resonators in order to gain small ripple.

8. (Original) A resonator filter manufactured by the method of claim 5.

9. (New) A method for manufacturing a resonator filter to minimize current flowing in order to reduce an intermodulation distortion, the method comprising the steps of:

forming a plurality of resonators, each of said resonators having a cylindrical form which has a ratio of an inside diameter to an outside diameter in a range which is larger than about 1:3 and smaller than or equal to about 1:3.75, each of said resonators also having a height (H) as $\lambda/4$, with λ being a wavelength of a plane wave provided to the respective resonator; and

connecting said plurality of resonators by J inverters in parallel to form the resonator filter.

10. (New) The method as recited in claim 9, wherein the plurality of resonators are formed for making characteristic impedance of an equivalent circuit of the resonator filter have a value in a range which is larger than about 65 Ω and smaller than or equal to about 79 Ω.

11. (New) The method as recited to claim 9, wherein the resonator filter reduces the intermodulation distortion of said resonator filter by increasing coupling between said resonators in order to gain small ripple.